

THE ROLE OF INTERNATIONAL CONVENTIONS IN PROTECTION OF SPECIES: A CASE OF RAMSAR SITES IN UGANDA

Achilles Byaruhanga, Michael Opige NatureUganda P. O. Box 27034, Kampala
Paul Mafabi, Wetlands Management Department, Kampala

ABSTRACT

Uganda ratified the Ramsar Convention in 1988 and since then the country has made significant progress in implementing the principles of the convention. Parties to the Ramsar Convention are expected to demonstrate their commitments to wetland management through three 'pillars' of action: 'wise – or sustainable – use of wetlands; identification of internationally important wetlands for inclusion in the Ramsar List; and the international cooperation and sharing of information and expertise. After acceding to the treaty in 1988, Uganda listed the Lake George Ramsar site. A second site, Lake Nabugabo, was added to the list in February 2004. Since then, nine sites have been gazetted in September 2006. Today Uganda has eleven Ramsar sites covering a total area of 354,803 hectares. Uganda contains an extensive and varied wetlands network that covers around 13% (30,680 sq. km) of the country's land area of which Ramsar sites cover 12%. The Government of Uganda developed the Wetland Policy in 1995 which set out strategies for wetland use and an assessment in 2001 indicated that 39% of the Ugandan population was aware of the functions and benefits provided by wetlands. The 11 Ramsar sites in Uganda may conserve 87% of the total wetland bird species (W, w) of Uganda based on the distribution records of species and 82% of globally threatened wetland species. This demonstrates the value of international conventions in protection of critical species, sites and habitats.

INTRODUCTION

Uganda is a landlocked country which lies directly on the equator in East-Central Africa and covers 236,000km² in size, an area comparable to the United Kingdom. Uganda contains an extensive and varied wetlands network that covers around 13% (30,680 sq. km) of the country's land area. Most of these wetlands are products of the country's four major lake systems: Victoria, Kyoga, Albert and the Edward/George basins. One summary (Visser 1960) catalogues them neatly as lake edges; Nile shore swamps; and valley swamps. The reality is somewhat rather more complex, the latter category alone encompassing broad, shallow-sided floodplains in the north of the country; the soggy bottoms of the deep, V-shaped valleys that dissect the south-western highlands, broad, papyrus-choked valleys that seep into Lake Victoria, the boggy floors of the glaciated valleys of the Rwenzori mountain and the saline craters in the western rift valley. The diversity of wetlands also contain a diversity of plants and animals. For example there are 238 species of wetland birds (Ww) of the 1040 species known for Uganda. This poster attempts to show the role of international conventions in protection of species using Ramsar sites as a case study.

METHODS

Information presented in this paper comes from *NatureUganda's* work on wetlands surveys and conservation, the Important Bird Areas programme, the waterfowl counts monitoring reports and the Ramsar sites information sheets. Information has also been obtained from the wetlands Management department reports and the National Biodiversity data base distribution records.

RESULTS

Identification of Ramsar sites

There are eleven Ramsar sites in Uganda (Fig.1). They cover 354,803 ha which represents 12% of wetlands in Uganda. Lake George contains the highest number of water bird species followed by Murchison Falls National Park. There has been more surveys in these sites and habitat diversity. Sites share similar bird species and 6 sites contain all species occurring in all Ramsar sites (Fig. 2) Lake Bisina, Lake Nakuku, Nabajuzi wetland, Mabamba Bay and Lake Mburo- Nakivali system do not add new species to the accumulation curve but contain globally threatened species. Some of the sites such as Lutembe bay receive huge congregations of palearctic migrants (Fig.2)

Table 1. Ramsar Sites; Location and diversity of water birds

Name	Date listed	Location	Area (ha.)	Total number of species	Total Number of Wetland species	global threatened species (Ww)	Regional Red data species (Ww)
1. Lake George (LGE)	04/03/88	00°07'N 030°02'E	15,000	491	167	9	28
2. Lake Nabugabo wetland system (NBG)	11/02/04	00°24'S 031° 54'E	22,000	281	108	4	23
3. Lake Mburo-Nakivali Wetland System (LMP)	15/09/06	00°40'S 030° 57'E	26,834	312	92	7	28
4. Lake Bisina Wetland System (BSN)	15/09/06	01°43'N 033° 54'E	54,229	162	81	4	21
5. Lake Nakuku Wetland System (NKW)	15/09/06	01°15'N 033° 31'E	91,150	258	88	3	21
6. Lake Opeta Wetland System (OPT)	15/09/06	01°42'N 034° 14'E	68,912	174	93	3	22
7. Lutembe Bay (LTB)	15/09/06	00°10'N 032° 34'E	98	230	120	7	26
8. Mabamba Bay Wetland System (MBB)	15/09/06	00°07'N 032° 21'E	2,424	200	91	3	19
9. Murchison Falls-Albert Delta Wetland System (MFP)	15/09/06	01°57'N 031° 42'E	17,293	428	144	8	29
10. Nabajuzi Wetland System (NBJ)	15/09/06	00°46'S 031° 41'E	1,753	157	44	3	18
11. Sango Bay-Musambwa Island-Kagera Wetland System (SAMUKA) (MSB)	15/09/06	00°55'S 031° 46'E	55,110	372	105	3	19
12. Rwenzori Mountain National Park (RNP)	23/1/08	0°25' - 0°50' N, 29°30' - 30°09' E.	224	177	-	-	-

Figure 2. Diversity of birds in Ramsar sites in Uganda

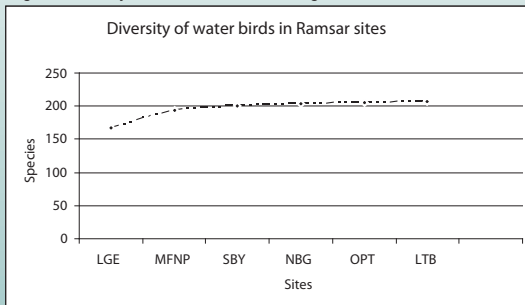


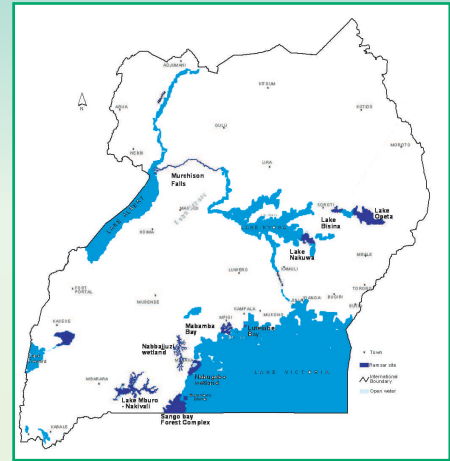
Table 2. Threatened species in Ramsar sites

Categories	Total No.	Ww Spp.	% rept.	Ww in RS	% Ww in RS
IUCN Red data species	48	17	35	14	78
Regional Red data species	190	56	30	46	82
Ww Spp.	238 (23%)	—	—	208	87
Total Spp.	1040	—	—	> 540	>50%

Ww = wetland restricted species w = species not restricted to wetlands

Over 540 species of birds have been recorded in Ramsar sites in Uganda of which approximately 238 are wetland (Ww) species constituting about 23% of the total bird species known in the country (Table. 2). The eleven Ramsar sites contain 87% of Ww species but 30 Ww species are not covered by the already designated Ramsar sites. Uganda has 190 regional red data species of which 56 are Ww species and 46 (82%) are recorded in the Ramsar sites.

Fig.1 Ramsar Sites In Uganda



Protection of globally threatened species

There are 48 IUCN red data species in Uganda of which 17 are wetland birds (Ww) species and 14 (82%) of Ww are recorded in Ramsar sites (Table 3). Only three globally threatened wetland species are not recorded in the Ramsar site and two of these are not recorded in a protected area. Although the Grauer's Swamp Warbler, an Albertine Rift endemic is not recorded in any Ramsar site, it however exists in protected area systems i.e. Bwindi NP, Echuya FR and Mgahinga NP. Maccos Duck is known from very few records and its status in Uganda is not well known. Basra Reed Warbler accidental visitor (vagrant), is known from few records in the Kyoga basin. The Ferruginous Duck also a palearctic migrant is known from two old records on Lake Albert and QENP. Two species (Maccoa Duck and Basra Reed Warbler) are therefore of immediate concern and new Ramsar sites need to consider the coverage of such species and the 30 other wetland species.

Table 3. Wetland birds that are globally threatened but not recorded in Ramsar sites.

Species	Common name	Threat status	category	Migration status	Current protection status	Probable areas found
<i>Oxyura maccoa</i>	Maccoa Duck	NT	W	Vagrant	Not protected	Kyoga basin, Lake Bunyonyi, Kayumba
<i>Bradypterus graueri</i>	Grauer's Swamp-Warbler	VU	W	Resident	Protected	Bwindi NP, Echuya FR, and Mgahinga NP
<i>Acrocephalus griseldis</i>	Basra Reed-warbler	EN	w	Vagrant	Not protected	Lake Kyoga basin

Ramsar sites and the Protected Areas in Uganda

Uganda's Ramsar sites can be categorised geographically as occurring in the following zones.

- **Lake Victoria shoreline:** Three sites lie immediately adjacent to Lake Victoria. Sango Bay, Lutembe Bay and Mabamba Bay Ramsar sites contain wetlands on the shores of Lake Victoria, while the Lake Nabugabo site contains a series of small satellite lakes in the immediate hinterland.
- **Lake Victoria hinterland:** Two sites, Nabajuzi and Lake Mburo, lie in the extensive swampy river systems of the Katonga and Bukora/ Fwizi which drain into the north-western part of Lake Victoria.
- **Albertine Rift region:** Two sites, Lake George and Murchison-Albert delta lie on the floor of the Albertine Rift Valley and the proposed Rwenzori bogs which lies on montane areas of the Rwenzoris.
- **Lake Kyoga basin:** Three sites, Lake Nakuku, Lake Bisina and Lake Opeta, contain wetlands within tributary wetland valleys entering the eastern end of the Lake Kyoga basin.

There are only four Ramsar sites that are located within protected areas. These include the following:

- Lake Mburo-Nakivali Wetland System which occurs partly in Lake Mburo National Park but the Ramsar site extends down stream to cover Lake Nakivali wetland.
- Lake George wetland occurs within Queen Elizabeth National Park and is fully protected. The main threats result from pollution mining in catchment
- Murchison Falls-Albert Delta Wetland System is covered by Murchison Falls National Park along the Nile and the delta regions. However, the park does cover the north section of Lake Albert which part of the Ramsar site. The area is threatened by proposed oil mining in Albertine graben
- Rwenzori Mountain bogs occur with Rwenzori Mts National Park. The major threat to this site will result from reduced glaciers which are the main source of water and tourism development.



White - winged Black Terns at Lutembe Bay

CONCLUSION

There are eleven Ramsar sites covering 12% of wetlands in Uganda and together the sites contain 87% of the total number of wetland species in Uganda. The Ramsar sites also contain 14 (78%) of the 17 globally threatened wetland species and the remaining three species being vagrants. In addition Ramsar sites are very diversified with many non-wetland species. The Ramsar Convention through Ramsar sites designation has contributed to the protection of species in Uganda.

References
Byaruhanga A, Kasoma P, & Pomeroy D.(2001). Important Bird Areas in Uganda. EANHS, Kampala
NatureUganda (2006) The Ramsar information sheet